

VIII. *Descriptions of New Species of Central and South American Rhopalocera.* By F. DU CANE GODMAN, F.R.S., F.L.S., and OSBERT SALVIN, M.A., F.R.S.

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THE following descriptions are taken partly from specimens in our own collection, partly from others sent us by Dr. Staudinger for determination. Some of them we hope to figure in the Supplement to the Rhopalocera of our 'Biologia Centrali-Americana,' now in course of publication.

*Danais nivosus*, sp. n.

*Danais hermippus*, Druce, P.Z.S., 1876, p. 206 (*nec* Felder).

*D. gilippo* (Cr.), ex Brasilia affinis sed alis multo pallidioribus, maculis omnibus albis multo majoribus præsertim iis ad cellulæ posticarum finem, maculis submarginalibus albis in seriebus duabus distinctis positis. Exp. al., 3·2 in.

*Hab.* PERUVIA SEPTENTRIONALIS (*Krause*), Viña (*O. T. Baron*); Cormillo (*Pearce*).

We have nine specimens of this *Danais* (five males and four females) all agreeing with one another in the above characters whereby the insect may be distinguished from the common *D. gilippus* of the northern and eastern portions of the South American continent.

*Danais erginus*, sp. n.

*D. eresimo* (Cr.), affinis sed alis saturatoribus, maculis omnibus albis magis distinctis punctis submarginalibus albis in seriebus duabus distinctis positis; anticarum apicibus fere nigris; posticis area discali distincte pallida. Exp. al., 3·2 in.

*Hab.* PERUVIA SEPTENTRIONALIS, Payta (*A. H. Markham*); Viña (*O. T. Baron*).

We have two males and three females of this strongly marked form of *D. eresimus*: the white subapical and discal spots of the primaries are large and distinct, and the double subapical row of white spots on the secondaries clearly shown.

*Ituna lanassa*, sp. n.

*I. lamiro* (Latr.), similis et certe forma meridionalis; anticis maculis semihyalinis omnibus multo majoribus iis ad angulum analem confluentibus, macula magna ad basin cellulae ultra venam subcostalem et venam medianam extendente; posticis plerumque medialiter magis hyalinis colore fulvo ad angulum analem restricto, venis discocellularibus late nigris ut in *I. phænarete*. Exp. al., 4.3 in.

*Hab.* PERUVIA ORIENTALIS, Huayabamba (*Garlepp*); Pozuzo (*Pearce*).

We have three male specimens of this species agreeing fairly in the above characters, though the spots of the primaries in one of the Huayabamba examples are more confluent than in the others, and in the other the hyaline spot at the base of the cell does not pass the subcostal nervure. The transverse bands, one of which crosses the apex of the secondaries and the other covers the end of the cell, are both strongly marked in *I. phænarete*.

*Olyras præstans*, sp. n.

*O. insigni* similis sed posticis margine externo unicolore haud introrsum rufo marginato; subtus posticis margine nigro costali maculis duabus albis notatis. Exp. al., 4.1 in.

*Hab.* COLOMBIA, San Martin, Llanos of R. Meta.

(*Mus. nostr.*); Colombia (*Mus. Staudinger*).

We have seen two specimens of this *Olyras* which resembles the Central-American *O. insignis*, Salv. (*Biol. Centr.-Am. Rhop.*, i., p. 8, t. 1, fig. 1), but has no rufous inner border to the dark outer margin of the secondaries, and is thus readily distinguished.

*Olyras staudingeri*, sp. n.

*Olyras montaguï*, Godm. and Salv., *Biol. Centr.-Am. Rhop.*, i., p. 7 (*nec* Butler).

*O. montagui* similis sed anticis vena mediana fulva, posticis medialiter fere omnino fulva ad angulum apicalem vix pallidioribus, fascia lata mediana semihyalina haud notata; subtus macula exteriori costali alba majore et triangulari maculis submarginalibus anticarum albis haud interruptis. Exp. al., 4.0 in.

The receipt of additional specimens of the true *O. montagui* from the Cauca Valley, in Colombia, shows that the Central-American insect referred by us to that species is really distinct. This is Dr. Staudinger's view, and we call the species of Central America after him.

*Tithorea monosticta*, sp. n.

*T. duenne* similis sed posticis fascia transversa integra nigra nulla, macula ad angulum apicalem tantum notatis: subtus posticis fascia maculosa et macula flavida ad angulum apicalem. Exp. al., 3.95 in.

*Hab.* PANAMA, Chiriqui (*Mus. Staudinger*).

A female specimen sent us by Dr. Staudinger differs in the above points from *T. duenne*, of Guatemala. It also differs from *T. pinthias* of Panama in having a narrower dark border round the apical angle of the secondaries and a single isolated black spot.

*Phyciodes faustus*, sp. n.

*P. ptolyca* affinis, alis anticis aliter punctatis, maculis duabus medianis (inferiore majore fere rotundata), duabus subapicalibus (inferiore parva superiore elongata) fascia mediana posticarum integra, lineola submarginali evanescenti. Exp. al., 1.25 in.

*Hab.* PANAMA, Chiriqui (*Mus. Staudinger*).

Though compared with *P. ptolyca* this species has only a general resemblance to that insect. The spots on the primaries are much fewer in number and differently placed, only a small one standing in the end of the cell with a larger one below it. The wings are narrower.

*Phyciodes anomalus*, sp. n.

Alis fusco-nigris, ciliis albo interruptis; anticis dimidio distali punctis albis notato; posticis fascia mediana fulva intra eam punctis quibusdam ejusdem coloris et extra eam punctis albis: subtus

pallidioribus, anticis punctis albis majoribus lunulis submargin-alibus saturate fulvis; posticis fascia mediana cervina extra eam lunulis nigris et punctis albis seriatim positis, lunulis fulvis submarginalibus nigro limbatis et intra eas lunulis albis, ad basin fulvo et albido maculatis, maculis omnibus late nigro marginatis; palpis fuscis subtus albis; abdomine subtus albido supra fusco, lateribus albido punctatis. Exp. al., 1·3 in.

*Hab.* MEXICO, Colima (*Mus. Staudinger*).

A remarkable species with no near allies that we know of.

*Anæa elara*, sp. n.

♂ Alis ecaudatis cyaneo-nigris; anticis fascia subapicali arcuata venis quadripartita viridi-cyanea; posticis unicoloribus ad marginem exteruum squamis viridi-cyaneis atomatis: subtus læte castaneis albo irroratis marginibus externis immaculatis, posticis macula parva ad medium marginis costalis. Exp. al., 3·0 in.

♀ major, alis ad basin viridi-cyaneo lavatis, anticis fascia subapicali latiore et fere ad angulum analem extensa, posticis caudatis.

*Hab.* COSTA RICA (*Mus. Staudinger*).

This *Anæa* is allied to *A. proserpina*, Salv., and *A. ambrosia*, Druce, having the underside of the former and the upper somewhat like that of the latter.

Dr. Staudinger has sent us a male and female, the former in good condition, but the latter has lost the tail to the hindwings found in all the allied species.

*Lemonias eudocia*, sp. n.

Alis saturate fuscis undique nigro maculatis, maculis singulis saturate ochraceo indistincte limbatis, ciliis fuscis irregulariter albo interruptis: subtus omnino pallidioribus maculis omnibus nigris albido cinctis. Exp. al., 0·96 in.

*Hab.* MEXICO OCCIDENTALIS, Colima (*Mus. Staudinger*).

A small insect belonging to the section represented in Central America by *L. glauca* and *L. densimaculata*. From the former it differs in the colour of the wings,

which are dark fuscous and not bluish-grey, and from the latter in the darker colour of the wings, the black spots being less apparent.

The single specimen sent us by Dr. Standinger is probably, from the shape of the wings, a female, but the front legs are injured or wanting.

*Theope speciosa*, sp. n.

♂ Alis anticis nigris, area interna cærulea, reliqua (parte discali et marginè externo exceptis) dense squamis cyaneis notatis; posticis cæruleis, costa et margine externo anguste nigris: subtus pallide murinis maculis tribus parvis ad angulum analem nigris albido circumcinctis, fronte inter oculos cinnamomea, corpore subtus alis concolor. Exp. al., 1.2 in.

*Hab.* COLOMBIA OCCIDENTALIS, Rio San Juan (*Mus. Staudinger*).

A beautiful species, of which Dr. Standinger has sent us a single male specimen for description. It belongs to the *T. virgilius* group, but differs in having the primaries, for the most part, black with a deep blue gloss over the greater portion, the inner edge alone being of the blue found in *T. virgilius*.

*Theope talna*, sp. n.

♀ Alis nigris ad basin cæruleis, anticis macula subapicali tripartita quoque cærulea: subtus pallide cinnamomeis, posticis maculis duabus submarginalibus nigris cæruleo introrsum limbatis ad angulum analem maculis alteris evanescentibus juxta cas una utrinque cæruleis; fronte inter oculos et corpore subtus cinnamomeis. Exp. al., 1.5 in.

*Hab.* HONDURAS, Ruatan I. (*G. F. Gaumer*).

A female specimen captured by Dr. Gaumer on Ruatan I. differs from all others in our collection in having a very restricted amount of blue at the base of the wings, the black outer portion very largely predominating. The underside of the wings is of a uniform cinnamon colour, with a few spots near the margin of the anal angle.

It is allied to *T. virgilius*, but is much darker both above and below, and has more rounded wings.

*Theope matuta*, sp. n.

Alis nigris, anticis ad basin (costa nigra excepta) nitide cæruleis venis divisis; posticis area interna usque ad basin nitide cærulea, costa late, margine externo angustiore, nigris: subtus fuscis costa ad basin rufa, maculis elongatis discalibus albidis transfasciatis, fascia maculosa submarginali ejusdem coloris; posticis maculis sagittiformibus submarginalibus, aliisque elongatis discalibus indistincte notatis, fronte inter oculos nigra utrinque albedo marginata, corpore fusco, palpis nigris antice albis, abdomine linea mediana alba. Exp. al., 1.8 in.

*Hab.* COSTA RICA, Santa Clara Valley (*F. A. Zürcher*).

This *Theope* is allied to *T. thebais* of the Amazon Valley, but the blue on the upper side of the wings is much brighter. Beneath the wings are darker and the pale markings more definite, and the rufous base of the costa of the primaries is more extended.

We have only seen a single female specimen of this distinct species, which was contained in a collection made in the Santa Clara Valley, Costa Rica, at an altitude of 1,200 feet above the sea, by Mr. F. A. Zürcher.

*Theope diores*, sp. n.

Alis fusco-nigris; anticis ad basin cæruleis costa omnino fusca; posticis cæruleis, costa late, angulo apicali usque ad maculam magnam ad medium marginis externi nigro-fuscis; margine interno albedo; subtus rufescente griseis posticis punctis quibusdam nigris ad marginem externum subtrianguliformibus et introrsum pallide cæruleo limbatis, corpore supra cæruleo subtus alis concolore. Exp. al., 1.5 in.

*Hab.* MEXICO, Colima (*Mus. Staudinger*); Jalapa (*H. Edwards*).

We have seen two male specimens of this species, one of them lent us by Dr. Staudinger, and the other given us by the late Henry Edwards, who probably received it from Mr. Schaus in one of his earlier collections. The most nearly allied species is perhaps the common *T. virgilius*, from which it may at once be recognized by the large dark spot which interrupts the blue hindwings near the middle of the outer margin.

*Theope polimela*, sp. n.

*T. virgilio* similis sed anticis colore cæruleo magis extenso angulum analem fere attingente, subtus vix differt. Exp. al., 1.75 in.

*Hab.* COLOMBIA (*Mus. Staudinger*); Cauca Valley (*T. H. Wheeler*).

Two male specimens of this *Theope* differ from all those of that sex in our collection from many localities in Central America. The greater extension of the blue of the primaries towards the anal angle seems sufficiently marked to justify the separation of this southern form.

*Theope mania*, sp. n.

♀. *T. eleuthoni* similis sed alis cærulescentioribus anticarum apice minus acuto; posticis (præter costam nigram) omnino cæruleis. angulo anali minus producto: subtus pallidioribus anticis ad basin vix rufescentibus, posticis maculis submarginalibus evanescentibus. Exp. al., 1.9 in.

*Hab.* MEXICO, San Blas (*W. B. Richardson*).

This is a species of *Theope*, having a dark line across the undersurface of both wings. We have as yet received only a single female which was taken by Mr. Richardson at San Blas, in Western Mexico, in May, 1889.

*Theope eleutho*, sp. n.

Alis fusco-nigris; anticis ad basin viridescenti-cæruleis, costa omnino nigricante maculis tribus subapicalibus in linea obliqua viridescenti-cæruleis; posticis area interna et area discali viridescenti-cæruleis hac venis nigris intersecta, costa late nigricante, margine interno albicanti: subtus glauco-fuscescentibus linea communi ab angulo anticarum apicali ad medium marginis interni posticarum saturate fusca, anticis ad basin rufescentibus, maculis duabus in cellula albis, posticis maculis parvis septem submarginalibus nigris; altera alba ad cellulæ basin; corpore supra cæruleo subtus alis concolore. Exp. al., 2.2 in.

*Hab.* PANAMA, Chiriqui (*Trötsch, in Mus. Staudinger*).

Dr. Staudinger has sent us a single female specimen of this *Theope*, which differs from all others in our collection. It belongs to the section having a common line on the underside running from the apical angle of the primaries

to the middle of the inner border of the secondaries. The apical angle of the primaries is acute and salient owing to the outer margin being slightly concave towards the point. The anal angle of the secondaries, too, is acute.

*Papilio eracon*, sp. n.

Alis saturate æneo-nigricantibus, cillis inter venas ochraceis; anticis maculis sex submarginalibus, ad angulum apicalem evanescentibus, viridi-ochraceis; posticis paulo nitentioribus, maculis sex discalibus fere rotundis et punctis sex (horum duobus inter venam medianam et ramum ejus secundum) submarginalibus viridi-ochraceis; subtus fuscis; anticis ad basin nigricantibus, maculis tribus ad angulum analem aliisque indistinctis circa cellulæ finem ochraceis; posticis maculis septem transversim elongatis nigro limbatis rubidis et inter eas punctis glauco-albidis, extra eas punctis sex majoribus submarginalibus ochraceis; abdomine supra ochracea segmentis nigro marginatis, corpore toto subtus fulvo maculato. Exp. al., 5.0 in.

*Hab.* MEXICO OCCIDENTALIS, Colima (*Mus. Staudinger*).

A male of this distinct species differs from all forms of this section of *Papilio* found in Central America in having the spots of the secondaries in a submarginal series away from the cell and the costa, and beyond them are some small submarginal spots. Beneath the coloration of the margin of the secondaries is very marked; besides the usual black margined rufous spots there are whitish spots between them, as well as ochraceous ones next the margin.

*Papilio iopas*, sp. n.

*P. copanæ* similis sed anticis supra omnino immaculatis posticis fascia maculosa angustiore a margine externo magis remota. Exp. al., 4.55 in.

*Hab.* MEXICO OCCIDENTALIS, Colima (*Mus. Staudinger*).

A single male specimen sent us by Dr. Staudinger seems sufficiently distinct from *P. copanæ* to require a name. It is still more distinct from the *Papilio* from San Blas which we described and figured as *P. procas* (B.C.A. Rhop., ii., p. 203, t. 65, figs. 15 and 16), which has a few spots on the primaries near the anal angle, and a wider discal band to the secondaries, part of which enters the cell.